

## WE CLAIM AS OUR INVENTION:

- 1        1.    A microlancet device formed of silicon and having a  
2            sharp point for piercing the skin of a subject.
- 1        2.    The microlancet device of Claim 1 wherein the  
2            microlancet device has a cross section between  
3            approximately 50 micrometers and approximately 250  
4            micrometers.
- 1        3.    The microlancet device of Claim 1 wherein the  
2            microlancet device has a length between approximately  
3            1 millimeter and approximately 3 millimeters.
- 1        4.    The microlancet device of Claim 1 and further  
2            comprising a nitride film deposited on the silicon  
3            substrate.
- 1        5.    The microlancet device of Claim 5 wherein the nitride  
2            film has a thickness of approximately 2000 Angstroms.
- 1        6.    The microlancet device of Claim 5 and further  
2            comprising coating of photoresist on the nitride film.
- 1        7.    The microlancet device of Claim 5 and further  
2            comprising removing a portion of the nitride film.
- 1        8.    The microlancet device of Claim 8 wherein the portion  
2            of the nitride film is removed by potassium hydroxide.

- 1        9.    The microlancet device of Claim 9 and further  
2               comprising a photoresist coating applied to the  
3               silicon wafer.
  
- 1        10. The microlancet device of Claim 10 and further  
2               comprising patterning the silicon wafer with a plasma  
3               etching process.
  
- 1        11. The microlancet device of Claim 11 and further  
2               comprising removing the photoresist coating.

- 1 12. A method-of constructing a microlancet device formed  
2 of silicon and having a sharp point for piercing the  
3 skin of a subject, the method comprising:  
4 providing a silicon substrate; and  
5 plasma etching the silicon substrate into a sharp probe  
6 for piercing the patient's skin.
- 1 13. The method of Claim 13 and further comprising etching  
2 the silicon wafer into a microlancet device having a  
3 diameter between approximately 50 micrometers and  
4 approximately 250 micrometers.
- 1 14. The method of Claim 13 and further comprising etching  
2 the silicon wafer into a microlancet device having a  
3 length between approximately 1 millimeter and  
4 approximately 3 millimeters.
- 1 15. The method of Claim 13 and further comprising applying  
2 a sulfuric acid/hydrogen peroxide mixture in water to  
3 the silicon wafer.
- 1 16. The method of Claim 13 and further comprising  
2 depositing a nitride film on the silicon wafer.
- 1 17. The method of Claim 17 wherein the nitride film has a  
2 thickness of approximately 2000 Angstroms.
- 3 18. The method of Claim 17 and further comprising applying  
4 a coating of photoresist on the nitride film.

- 1 19. The method of Claim 17 and further comprising removing  
2 a portion of the nitride film.
- 1 20. The method of Claim 20 and further comprising removing  
2 a portion of the nitride film with potassium hydroxide  
3 etchant.
- 1 21. The method of Claim 21 and further comprising applying  
2 a photoresist coating to the silicon wafer.
- 1 22. The method of Claim 22 and further comprising  
2 patterning the silicon wafer with a plasma etching  
3 process.
- 1 23. The method of Claim 23 and further comprising removing  
2 the photoresist coating.  
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